



6BH6

# SHARP-CUTOFF PENTODE

7-PIN MINIATURE TYPE

6BH6

## GENERAL DATA

### Electrical:

Heater, for Unipotential Cathode:

Voltage. . . . . 6.3 . . . . . ac or dc volts

Current. . . . . 0.15 . . . . . amp

Direct Interelectrode Capacitances:

	Without External Shield	With External Shield <sup>o</sup>	
Grid No.1 to plate . . . . .	0.0035 max.	0.0035 max.	$\mu$ f
Grid No.1 to cathode, grid No.3 & internal shield, grid No.2, and heater . . . . .	5.4	5.4	$\mu$ f
Plate to cathode, grid No.3 & internal shield, grid No.2, and heater . . . . .	4.4	4.4	$\mu$ f

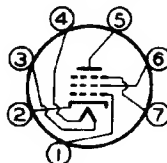
### Characteristics, Class A<sub>1</sub> Amplifier:

Plate Voltage. . . . .	100	250	volts
Grid No.3 (Suppressor) . . . .	Connected to cathode at socket		
Grid-No.2 Voltage. . . . .	100	150	volts
Grid-No.1 Voltage. . . . .	-1	-1	volt
Plate Resistance (Approx.) . . .	0.7	1.4	megohm
Transconductance . . . . .	3400	4600	$\mu$ mhos
Plate Current. . . . .	3.6	7.4	ma
Grid-No.2 Current. . . . .	1.4	2.9	ma
Grid-No.1 Voltage (Approx.) for plate current of 10 $\mu$ amp . . .	-5	-7.7	volts

### Mechanical:

Mounting Position. . . . .	Any
Maximum Overall Length . . . . .	2-1/8"
Maximum Seated Length. . . . .	1-7/8"
Length, Base Seat to Bulb Top (Excluding tip) . . . . .	1-1/2" $\pm$ 3-3/32"
Maximum Diameter . . . . .	3/4"
Dimensional Outline. . . . .	See General Section
Bulb . . . . .	T-5-1/2
Base . . . . .	Small-Button Miniature 7-Pin (JETEC No.E7-1)
Basing Designation for BOTTOM VIEW . . . . .	7CM

Pin 1 - Grid No.1  
Pin 2 - Cathode  
Pin 3 - Heater  
Pin 4 - Heater  
Pin 5 - Plate



Pin 6 - Grid No.2  
Pin 7 - Grid No.3,  
Internal  
Shield

<sup>o</sup> with external shield JETEC No.316 connected to cathode.

← Indicates a change.

SEPT. 1, 1955

TUBE DIVISION

DATA

RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

6BH6



6BH6

## SHARP-CUTOFF PENTODE

### AMPLIFIER - Class A<sub>1</sub>

#### Maximum Ratings, Design-Center Values:

PLATE VOLTAGE. . . . . 300 max. volts

GRID-No.2 (SCREEN) SUPPLY VOLTAGE. . . . . 300 max. volts

→ GRID-No.2 VOLTAGE. . . . . See Grid-No.2 Input Rating Chart  
at front of Receiving Tube Section

#### GRID-No.1 (CONTROL-GRID) VOLTAGE:

Negative bias value. . . . . 50 max. volts

Positive bias value. . . . . 0 max. volts

PLATE DISSIPATION. . . . . 3 max. watts

#### → GRID-No.2 INPUT:

For grid-No.2 voltages up to 150 volts . . 0.5 max. watt

For grid-No.2 voltages between 150

and 300 volts. . . . . See Grid-No.2 Input Rating Chart  
at front of Receiving Tube Section

#### PEAK HEATER-CATHODE VOLTAGE:

Heater negative with respect to cathode. . 90 max. volts

Heater positive with respect to cathode. . 90 max. volts

→ Indicates a change.

SEPT. 1, 1955

DATA

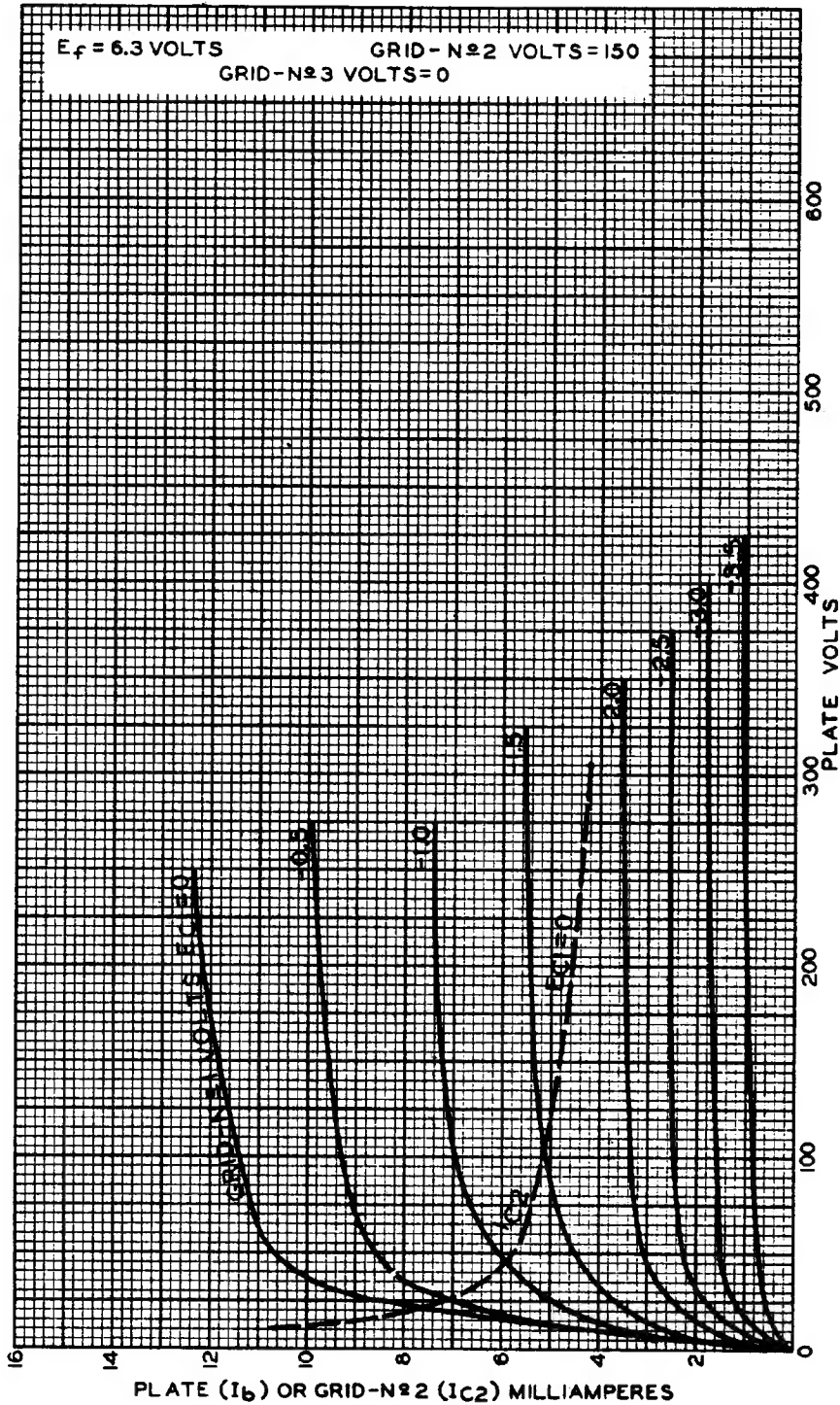
TUBE DIVISION  
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY



6BH6

6BH6

### AVERAGE PLATE CHARACTERISTICS



AUG. 23, 1947

TUBE DEPARTMENT  
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

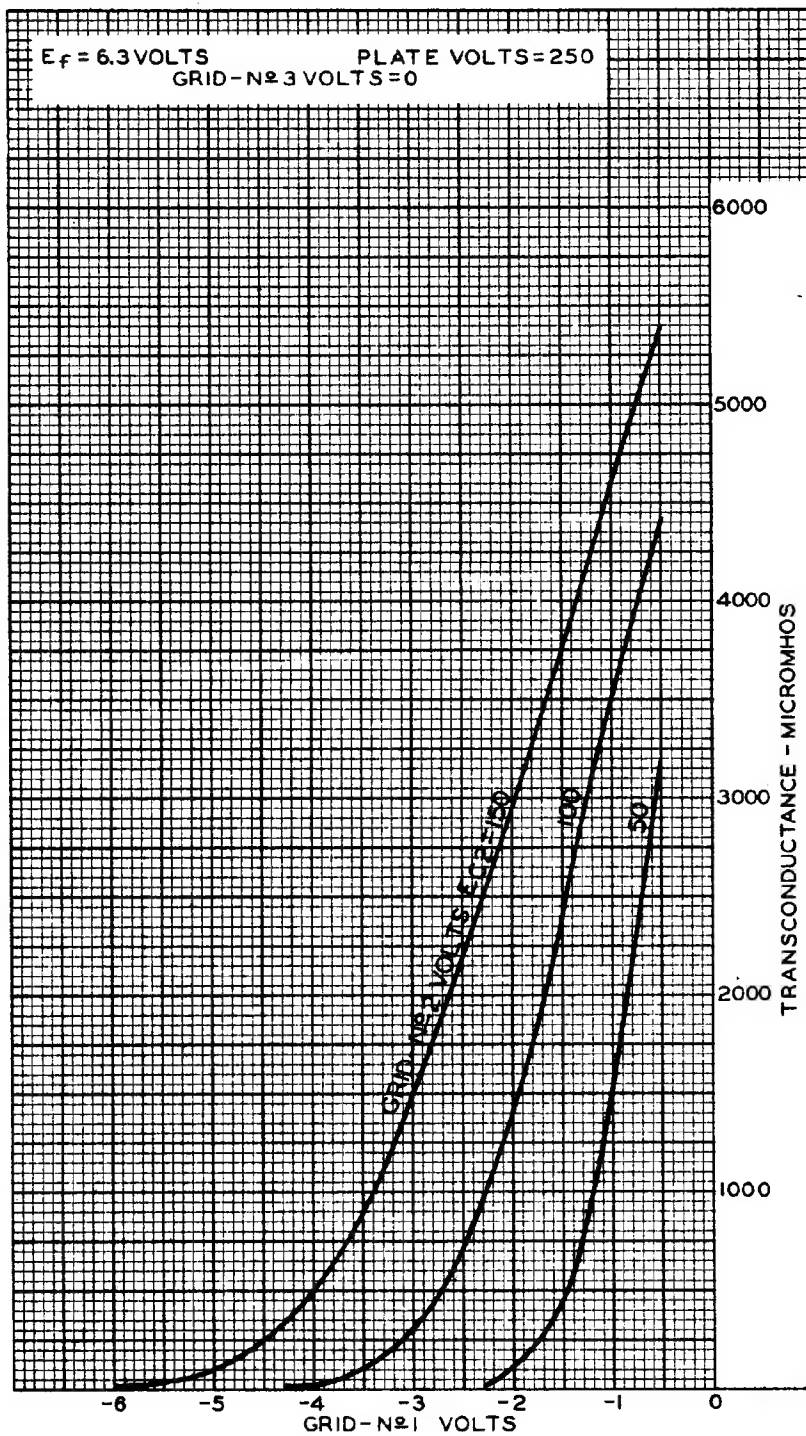
92CM-6892

6BH6



6BH6

### AVERAGE CHARACTERISTICS



AUG. 21.1947

TUBE DEPARTMENT  
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

92CM-6891



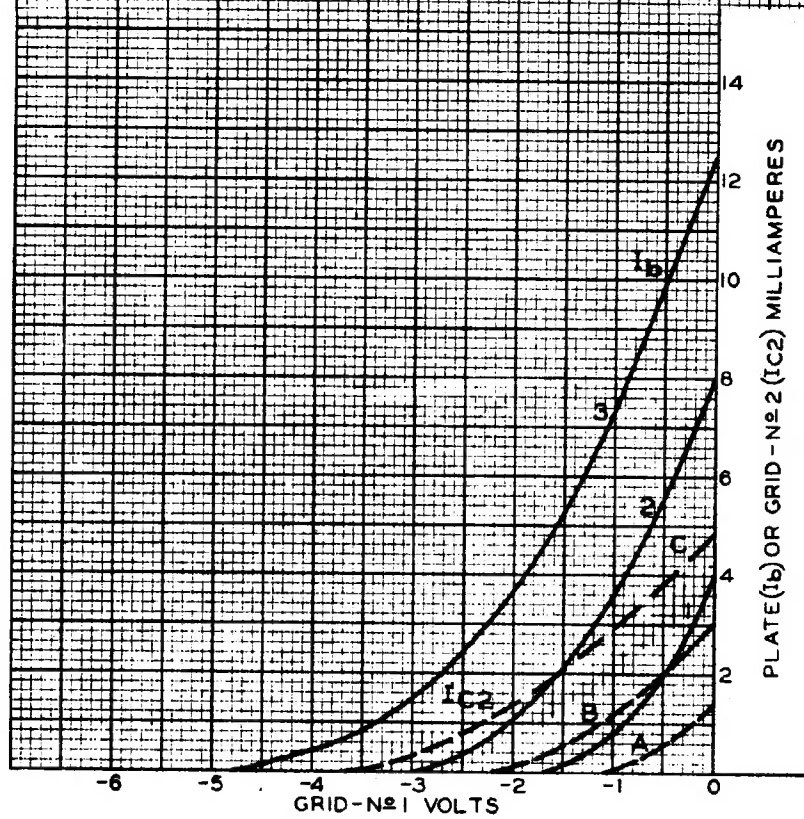
6BH6

6BH6

### AVERAGE CHARACTERISTICS

$E_f = 6.3$  VOLTS PLATE VOLTS = 250 GRID - N° 3 VOLTS = 0

CURVES		GRID - N° 2 VOLTS
$I_b$ —	$I_{c2}$ - -	
1	A	50
2	B	100
3	C	150



AUG. 22 1947

TUBE DEPARTMENT  
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

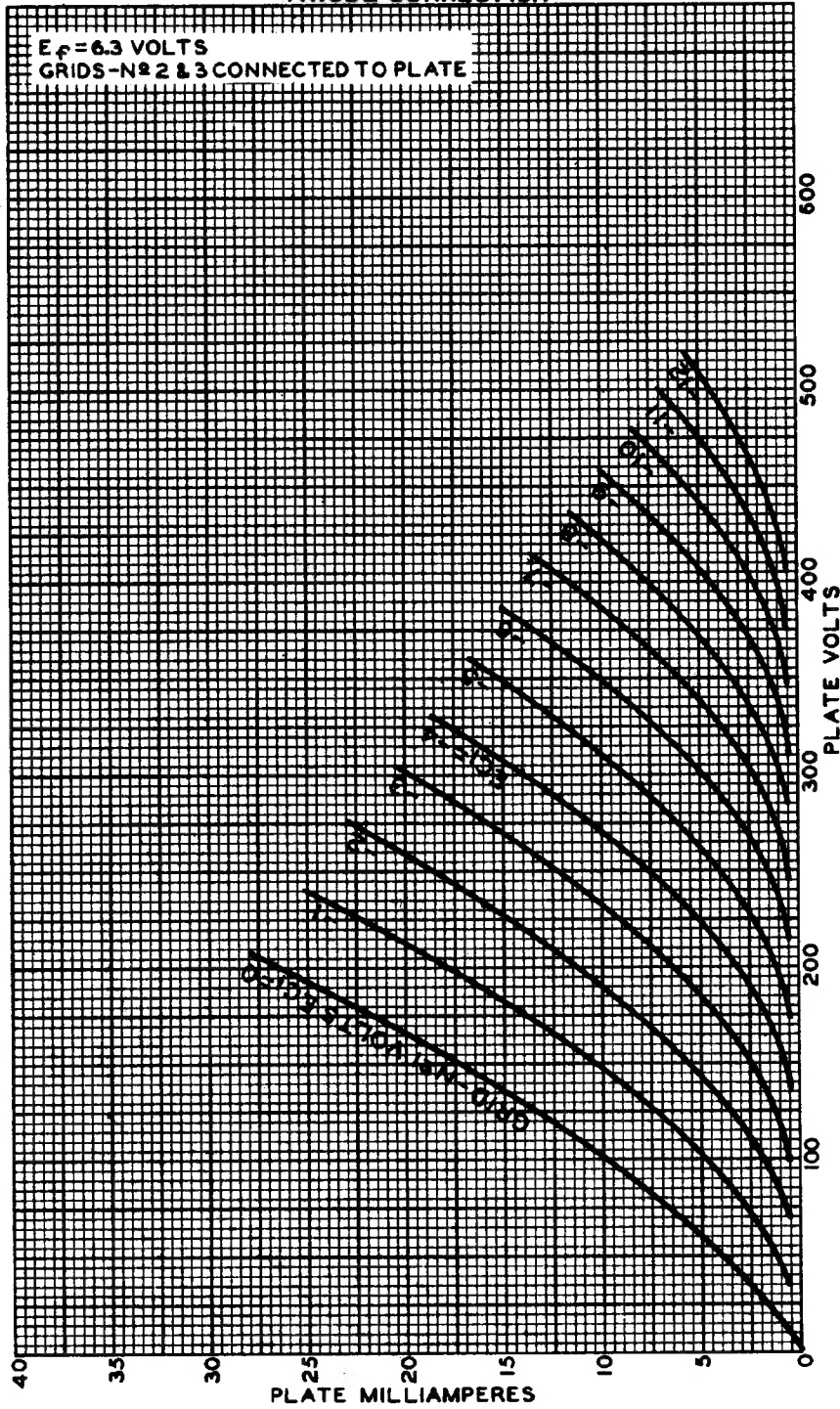
92CM-6893

6BH6



6BH6

# AVERAGE PLATE CHARACTERISTICS TRIODE CONNECTION



DEC. 10, 1947

TUBE DEPARTMENT  
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

92CM-6896